DOCUMENT RESUME

ED 371 921 RC 019 674

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TITLE School District Size and State Educational Costs in Kentucky. Revised.
INSTITUTION Prichard Committee for Academic Excellence, Lexington, KY.
PUB DATE May 94
NOTE 48p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Costs; Educational Change; *Educational Finance; Efficiency; Elementary Secondary Education; *School District Reorganization; School Districts; *School District Size; School District Wealth; *State Aid
IDENTIFIERS *Kentucky; Kentucky Education Reform Act 1990; Small School Districts

ABSTRACT

This paper was commissioned at the request of Kentucky's governor, who wished to ascertain whether state educational costs could be reduced by consolidating small school districts. The issue arises in the context of Kentucky's ongoing efforts to implement the Kentucky Education Reform Act of 1990 in the face of increasing state fiscal constraints. Comparison of Kentucky's school district organization with that of other states shows that Kentucky operates substantially fewer districts than average, operates a simple and optimal system of unified K-12 districts, and maintains average district sizes larger than two-thirds of states. Approximately two-thirds of Kentucky school districts match or exceed a general standard of "adequate" size. Analysis of the relationship between district size and state educational costs finds that the state could not save educational costs by consolidating small school districts. Major determinants of state educational costs include basic state per-pupil assistance to elementary and secondary schools and required local contributions to school finance, both of which are a direct function of school district property wealth. As a result, variation in state educational costs across Kentucky school districts is primarily related to district property wealth, not district size. Additionally, costs alone do not represent the full range of important considerations associated with school district consolidation. Other factors include student achievement, community identity, and district operations. Strategies to enhance local efficiency are discussed. Contains 11 tables, including rankings, number of school districts; national rankings, school enrollments; national rankings, average district size; school district sizes, property wealth, and state educational cost factors compared, 1992-93. Contains 27 references. (SV)

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ED 371 921

December 1993
Revised May 1994

School District Size and State Educational Costs in Kentucky

JACOB E. ADAMS, JR.

This paper was commissioned by

The Prichard Committee for Academic Excellence

Lexington, Kentucky

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AUTHOR'S NOTE: This paper was prepared for The Prichard Committee Task Force on School District Issues. I owe many thanks to individuals who supplied data, answered questions, critiqued the argument, and offered technical and research assistance. These individuals include Tom Willis, Legislative Research Commission; Robert Sexton and Cindy Heine, The Prichard Committee; Michael Foster, Vanderbilt University; and William White and Don Dailey, Policy Development and Program Evaluation, Vanderbilt University.

EXECUTIVE SUMMARY

The issue of school district size and state educational costs comes before The Prichard Committee Task Force on School District Issues at the request of Governor Jones. The issue arises in the context of Kentucky's ongoing efforts to implement the Kentucky Education Reform Act of 1990 and to do so in the face of increasing state fiscal constraints. The interest of the governor is in ascertaining whether state educational costs can be reduced by consolidating small school districts.

General Findings

This paper provides an analysis of the relationship between school district size and state educational costs and finds that the state could not save educational costs by consolidating small school districts. In fact, the major determinants of state educational costs include (1) the level of basic state per-pupil assistance to elementary and secondary schools (the SEEK base guarantee) and (2) required local contributions to school finance, both of which are a direct function of school district property wealth. This is not a surprising finding insofar as the Support Education Excellence in Kentucky (SEEK) program is funded on a per-pupil basis, with the state contribution to the base guarantee varying inversely on a dollar-for-dollar basis with local contributions. As a result, the variation in state educational costs across school districts in Kentucky is primarily related to school district property wealth, not district size. Kentucky, therefore, cannot reduce state educational costs by consolidating small school districts.

Efficiency strategies short of consolidation are discussed.

Specific Conclusions

Regarding school district organization in Kentucky and, specifically, the number of small school districts in the state.

1. Kentucky operates substantially fewer school districts now than it did earlier in this century, in keeping with national trends.
2. In national and regional comparisons, Kentucky operates substantially fewer school districts on average than other states.
3. Kentucky operates a simple and optimal system of unified school districts, delivering educational services within coordinated K-12 systems which rest local control in single entities for the purposes of taxation, policy making, and administration.
4. Kentucky maintains average district sizes larger than two-thirds of the states. Most districts in Kentucky, however, serve 3,000 or fewer students.
5. Approximately two-thirds of Kentucky's school districts already match or exceed a general standard of "adequate" size.
6. Smaller districts compose either a third, an eighth, or a fourteenth of the state's total cohort of districts, depending on the definition of small that is applied. In the national context, Kentucky operates only 0.2% of all districts

with fewer than 500 pupils. Regardless of the definition or number, Kentucky's smallest school districts most often are independent districts.

Regarding school district size and state educational costs in Kentucky.

7. State educational costs vary from a low of $2,022 to a high of $4,079. About two-thirds of Kentucky school districts cost the state between $2,719 and $3,485 per pupil.
8. Without controlling for district property wealth, a relationship between school district size categories (<800; 801-1,500; 1,501-3,307; 3,308-10,000; and >10,000) and average state educational costs is apparent, where average state costs per pupil decline as district size categories increase.
9. When the influence of district property wealth is removed, average state educational costs per pupil vary by less than 3%, with larger districts costing up to $89 per pupil more.
10. School finance factors that most affect state educational costs include local contributions to SEEK and state contributions to Tier 1. Both local contributions to SEEK and state aid in Tier 1 are a function of school district property wealth.
11. A correlation between local per-pupil contributions to SEEK and state per-pupil educational costs yields a coefficient of -0.88, a high figure. This indicates that state educational costs and local educational costs are inversely related, and that about 78% of all the variation in state educational costs are associated with differences in school district wealth.
12. The state base guarantee per pupil is the same regardless of district size. School district contributions to SEEK, however, vary from approximately $47,000 to $75 million.
13. It happens in Kentucky that school district size is associated with district wealth. By statutory definition, however, the determining factor in state educational costs in Kentucky is school district property wealth, not size.
14. The important relationship between school district wealth and state educational costs reflects the state's effort to equalize funding across school districts. The state school finance formula is working as intended.
15. Kentucky cannot save educational costs by consolidating small school districts.

Regarding school district consolidation and school district operational efficiencies.

16. Costs alone do not represent the full range of important considerations associated with school district consolidation. Other factors include student achievement, community identity, and district operations.
17. The research literature regarding consolidation and student achievement indicates that student achievement seldom is enhanced and sometimes is harmed by schooling children in larger educational units.
18. Schools and districts often serve as centers of community activity and symbols of community identity. Loss of citizen-government connections

through consolidation may be harmful to public participation in and commitment to public schools.

19. Though consolidation is problematic in terms of effecting cost savings and promoting educational achievement, numerous strategies are available to school districts to pursue technical efficiencies in district operations. Examples include reorganization activities short of consolidation, reallocation of district resources, and improved efficiencies in district operations.
20. Enhancing educational outcomes is a matter of holding decision makers accountable while fostering flexibility in how outcomes are pursued. School district size may be one component of a multifaceted strategy. It is not the only one, nor is it a crucial one.

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1. WHY RAISE THE ISSUE OF SCHOOL DISTRICT SIZE AND STATE EDUCATIONAL COSTS?

The issue of school district size and state educational costs comes before the Prichard Committee Task Force on School District Issues at the request of Governor Jones. The issue arises in the context of Kentucky's ongoing efforts to implement school reforms, and to do so in the face of increasing state fiscal constraints. The interest of the governor is in ascertaining whether state educational costs can be reduced by consolidating small school districts, a cost-savings or efficiency strategy that others, too, have proposed. Each of these contextual issues is described briefly below.

The Challenges of Educational Reform

Kentucky is now engaged in a substantial effort to provide an efficient system of public education for every child in the Commonwealth. In 1989, a state Supreme Court decision (Rose) provided Kentucky with the impetus to move ahead on a bold school reform agenda. The General Assembly subsequently shaped that agenda, crafting changes in school curriculum, governance, and finance that touch every aspect of the state's public schools. The result—the Kentucky Education Reform Act of 1990, or KERA—not only reconstituted elementary and secondary education in the state, it also provided a blueprint for systemic school change that leads the nation (Adams, 1993c).

Now state and local officials, educators, business leaders, parents, and others are working to test the promise of these reforms. Halfway through KERA's anticipated implementation period, Kentuckians have found that the effort required to transform these promises into practice is as great as the potential benefit of the practices themselves, and there is much work to be done. Implementation requires information, materials, professional support, and opportunities to practice (Adams, 1993a). Moreover, a lengthy period of time is needed to effect changes as broad as those embedded in KERA, to allow implementers an opportunity to work through numerous problems of communications, logistics, and professional practice (Fullan & Miles, 1992). These challenges notwithstanding, the state has made, and continues to make, substantial progress toward educational reform goals (OEA, 1993).

Increasing State Fiscal Constraints

As arduous as systemic school improvement may be under the best of circumstances, Kentucky's effort is made more difficult still by rising financial constraints. State revenues diminished recently as the effects of a national recession touched the state's economy (Loftus, 1993). In turn, shrinking state revenues have compelled Kentucky officials to pursue public goals and responsibilities with fewer resources, forcing choices about which state services to cut and how deeply to cut. Most state agencies experienced budget reductions during the 1992-1994 biennium (Loftus, 1993).

The K-12 educational system, too, has suffered financial setbacks, as expected resources for school reform failed to materialize. The schools' needs, of course, persisted, demanding materials, technology, training, time, and opportunities for classroom teachers to integrate new goals and reform strategies into daily practice. While money alone is insufficient to bring about educational improvements, sustained support is a necessary condition of implementation (Mazmanian & Sabatier, 1989). Like an automobile that won't carry its riders far on only a few gallons of gasoline, inadequate financial resources constrain the distance Kentuckians can travel toward better schools.

The Governor's Direct Interest

As the state simultaneously addresses the challenges of educational reform and declining public revenues, Kentucky policy makers, school professionals, and citizens alike share a responsibility to see that public investments in elementary and secondary schools are used wisely. In this context, Governor Jones raised a question regarding whether the state could save money, or extend its existing financial commitment to public schools, by consolidating small school districts. In the summer of 1993, in remarks before The Prichard Committee's annual meeting, the governor asked the Committee to investigate the relationship between school district size and state educational costs and to report whether savings are possible by reorganizing small districts.

The governor's query raises a number of issues. These issues include how to define a "small" school district, whether Kentucky has small school districts, whether there is a relationship between school district size and state educational costs, and whether cost savings alone constitute sufficient grounds to recommend small district consolidation. A related issue involves whether school district economies can be realized through district consolidation or other means. These issues are open to empirical analysis and professional experience, and each is discussed in the following pages.

Recent Recommendations to Consolidate Small Districts

Meanwhile, Governor Jones is not the first to raise the issue of small district consolidation. The issue has appeared before in Kentucky, as a potential reform in state school finance and as a question regarding school district size economies. The Task Force on School Finance (Melton, 1989), for example, concluded, in part, that small school districts, particularly those under 500 enrollment, operate less efficiently than their larger counterparts. The Task Force considered but did not recommend that all school districts under 800 enrollment be consolidated. Similarly, the Business Committee for Educational Excellence (n.d.), an entity of Kentucky businesses and chambers of commerce, recommended that the state reduce the number of school districts by providing incentives for consolidation and by forced consolidation of districts deemed to be inefficient. During the past decade, the Legislative Research Commission (Peyton & Brinly, 1983) and the Kentucky School Boards Association (Scott, 1989) also examined school district

size economies in Kentucky, with mixed results. Their findings are reviewed below.

In short, several factors warrant the present analysis of school district size and state educational costs in Kentucky. These factors include the state's focused effort on implementing major educational reforms, a context of diminishing state resources, the governor's specific query regarding the relationship between district size and state costs, and percolating interest regarding district size economies and small district consolidation.

Purpose of This Paper

The purpose of this paper is to provide The Prichard Committee Task Force on School District Issues with information necessary to respond to the central policy question the governor placed before the members, namely, can the state save money by consolidating small school districts? In so doing, the paper (1) compares Kentucky's school district organization with other states, (2) defines "small" school districts, (3) analyzes the relationship between district size and state educational costs in Kentucky, (4) examines relevant research on district size economies, (5) places school district consolidation in a broader context than that allowed by cost concerns alone, and (6) illustrates means of enhancing economies in school district operations. A beginning step in this analysis is to describe Kentucky's school district organization and to gain some perspective on these organizational arrangements by placing Kentucky in broader regional and national contexts.

2. HOW MANY "SMALL" SCHOOL DISTRICTS DOES KENTUCKY OPERATE?

Determining whether Kentucky has small school districts—perhaps too many—is a matter of examining the number, type, and size of school districts in the state and comparing these organizational characteristics to other states, research findings, and standards of practice.

Number of Kentucky School Districts

During the 1992-93 school year, Kentucky operated 176 school districts. This number has declined from 554 districts in 1915 (Melton, 1989). Kentucky, thus, operated 68% fewer school districts in 1993 than it did 78 years earlier.

This trend toward fewer school districts is typical of the nation's experience during the 20th Century. Approximately 130,000 school districts existed in the U.S. in the 1920s (Guthrie & Reed, 1991). Most of these were small, rural districts that operated a single school. This number declined to around 15,100 districts in 1991 (Table 1), a reduction of 79,900 districts or approximately 84% over a 60-year period. During this time, small district consolidation composed a major policy objective across the U.S., with many states maintaining incentive programs to reward small districts that consolidate (Odden & Picus, 1992). Most district consolidations, however, were undertaken primarily as a means of obtaining better educational opportunities for students, not as an economic measure, in the sense of reducing school expenditures (AASA, 1958).

How does the number of school districts in Kentucky compare with other states? Kentucky ranks 22nd nationally in total number of school districts (that is, the Commonwealth operates fewer school districts than 28 other states) (Table 1). In contrast, the state ranks 27th nationally in terms of total student enrollment (Table 2). An average state operates 302 school districts; the median, or midpoint, state operates 201. Kentucky, thus, operates 42% fewer school districts on average than other states. It operates 25 fewer districts (12%) than the national median.

Kentucky's neighbors also operate more school districts than the Commonwealth. States bordering Kentucky (that is, Tennessee, North Carolina, Virginia, West Virginia, Ohio, Indiana, Illinois, and Missouri) operate an average of 361 school districts (Table 1). Kentucky, thus, operates 51% fewer school districts on average than surrounding states.

In national and regional comparisons, therefore, Kentucky operates substantially fewer school districts on average than other states.

District Type

Of the 176 school districts in Kentucky, 120 are county districts, 56 are independent districts.[1] Whether county or independent, large or small, all but four

of Kentucky's 176 school districts are organized as unified districts, that is, they provide educational services in grades K through 12 within a specified geographic area, utilizing a single school board and single administrative staff.

In its reliance on K-12 districts, Kentucky is typical of many other states. Unified school districts, in fact, are the most common form of local educational agency (Guthrie & Reed, 1991). Still, the unified district configuration is one of many possible organizational arrangements that exist across the country. California, for example, organizes local agencies variously as elementary, high school, unified, county, union (representing a merger among formerly independent elementary districts), and joint (crossing county lines) districts. In these more complex situations, K-12 services for a single cohort of students often are provided by multiple taxing authorities, policy-setting boards, and administrative staffs. Such complexity, perhaps, led the American Association of School Administrators (AASA) Commission of School District Organization to contend that "the unified, or 12-grade, school district ... has proven to be the best system of school government devised by the American people" (AASA, 1958, p. 92).

Thus, compared to possible school district organizational arrangements, Kentucky's system of unified districts is simple and optimal in the sense of providing a coordinated K-12 educational program for all students, with educational taxation, policy making, and administration under the control of a single local agency.

District Size

Kentucky ranks 33rd nationally in terms of average district size (Table 3). That is, two-thirds of the states have average district sizes smaller than Kentucky. Commonwealth districts range in size (in terms of average daily attendance, or ADA[2]) from 191 in Southgate Independent to 81,523 in Jefferson County (1992-93 data). Mean district size in Kentucky is 3,307, while the median district size is 2,116. The median, or midpoint size among all districts, is substantially lower than average district size because the distribution of district sizes in Kentucky is skewed toward a few very large districts, notably, Fayette (29,074) and Jefferson (81,523) counties. If these very large county systems are omitted from the distribution, average district size in Kentucky drops 18% to 2,710.

The distribution of Kentucky school districts by size is displayed in Table 4. The vast majority of these districts—124 of the 176 districts, or 70%—serve 3,000 or fewer students. These 124 districts also serve about a third (33.24%) of all Kentucky students. Another third of Kentucky students attend school districts ranging in size from 3,000 to 8,000 ADA. The final third of Kentucky students attend the largest 11 districts, which range in size from 8,000 to 82,000 ADA.

Kentucky law does not define adequate size for a unified school district. Other states do. California, for example, which maintains a complex system of school district organization, requires unified districts to enroll at least 1,501 pupils

(California Education Code, Section 35753(a)). In school consolidation legislation of the mid-1980s, Illinois similarly proposed that districts meet a minimum 1,500 student enrollment to qualify for unification (Walker, 1990). These state actions are similar to the minimum 1,200 pupils recommended by the AASA Commission in 1958.

The 1,200 to 1,500 pupil professional and statutory standards for adequate school district size, however, are not clearly supported by educational research regarding district size economies. This research has attempted to determine what happens to school district costs and quality as size varies. It stems from a general perception that small schools or districts are inefficient and should be consolidated (Odden & Picus, 1992). Guthrie (1979) even argued that the assumption that "bigger is cheaper and better" became conventional wisdom among school administrators, though without the support of systematic, corroborating evidence. Bigger would be cheaper and better if district economies of scale could be determined. Economies of scale occur when average per-pupil costs decline as district size (scale) increases. Diseconomies of scale occur when average per-pupil costs increase as district size (scale) increases. Monk (1990) described the intent of this research as an effort to measure whether and to what degree it costs more to obtain the same educational result in a low-enrollment setting than in a large-enrollment setting. Unfortunately, the empirical research that addresses these questions is inconclusive and often weak.

Fox (1981), for example, provided a critical review of 34 studies of scale economies in education. He concluded that some district economies exist, but that researchers don't agree on the degree of economies because their measures of costs and size, and the type of districts analyzed, differ so much. Several studies found U-shaped average cost curves,[3] but with the minimum cost point varying from 675 to 51,000 pupils. Three district-level studies found economies associated with district administration; others produced mixed results. Findings for rural communities, for example, differed from those in urban centers. Fox concluded that while these studies do suggest that size economies exist over a limited range of pupil populations, the results are insufficient to fully answer policy questions about whether and when schools or districts should consolidate. A decade after Fox, reviews by Monk (1990) and Odden and Picus (1992) reached similar conclusions. These analysts also found that the research literature lacked a reliable estimate of adequate or optimal school district size. As a result, "there is not a strong research base for continuing to encourage school and district consolidation" (Odden & Picus, 1992, p. 238).

In the absence of better research-based guideposts regarding adequate district size, some help may be available, if indirectly, from evidence on school—rather than district—size economies. Again, Fox (1981) found a U-shaped cost curve for schools, over a limited range of school sizes. Monk's (1990) studies in New York are more specific. He found that by the time a school enrolls 100 students per grade level (in 9-12 high schools), administrators are successful in reducing the incidence of small classes and in promoting specialization among

teachers, behaviors consistent with scale economies. Beyond this 100-student-per-grade-level size, additional students did not lead to additional administrative decisions of the type consistent with scale economies. Monk, however, interpreted this data as evidence only of how scale economies are realized, not whether or when they exist. An admittedly loose extrapolation of this data across a hypothetical district yields an estimate of adequate district size starting, again, in the range of 1,200 to 1,500 pupils.

In short, adequate district size is hard to estimate. Even the California statutes and AASA report, which define adequacy in terms of numbers of pupils, themselves caution that any minimum size determination for a unified school district must be balanced against other important factors associated with school district organization, such as fostering community identity or avoiding lengthy commute distances for students. More recent assessments defined optimal district size not in terms of pupil numbers but in terms of the resources needed to produce a broad educational program (Campbell, Cunningham, Nystrand, & Usdan, 1985).

Still, as the research literature is inconclusive in determining adequate or optimal district size, the best guides for analytic purposes here remain the statutory and professional estimates of approximately 1,500 pupils. If the 1,500 ADA figure is adopted—with due caution—as a measure of adequate size for unified districts, Kentucky's school district organization looks like the following. Of the 176 districts in the state, 113 or 64% have ADA larger than 1,500 (Table 5). In this regard, Kentucky ranks 34th nationally in the percentage of districts with 1,500 or more pupils.[4] In other words, Kentucky operates more school districts of "adequate" size than 33 other states (Table 6).

What of the remainder of smaller districts? The definition of small districts can be construed variously. Using the report of the Task Force on School Finance plus the 1,500-pupil definition noted above, small districts can be defined as those with fewer than either 1,500, 800, or 500 ADA. Table 7 applies these definitions to Kentucky's school district organization. The result demonstrates that Kentucky operates either 63 (<1,500), 23 (<800), or 12 (<500) small school districts, depending on the definition applied. These numbers translate, respectively, into 36%, 13%, and 7% of all districts in the state. At the smallest end of this small scale, Kentucky ranks 16th nationally in terms of the percentage of districts with fewer than 500 students (Table 8). Kentucky's smallest districts, in fact, account for only 0.2% of all districts nationwide with fewer than 500 students.

Regardless of the number of small school districts in Kentucky, an important factor in the state's organization of school districts is the presence of independent districts. For example, of the 63 school districts with fewer than 1,500 ADA, 41, or about two-thirds, are independent districts. Of the 23 districts with fewer than 800 ADA, 20 are independent districts. Of the 12 districts with fewer than 500 ADA, 11 are independent districts. In short, the smallest school districts in Kentucky most often are independent districts. Maintenance of independent districts implies a choice or preference among local taxpayers and

parents, rather than an accident of geography, such as exists among sparsely populated rural areas, where small districts typically are found. Table 5 compares characteristics of independent and county districts and their frequencies. Independent districts in Kentucky are approximately 71% smaller on average than their county-district counterparts.

Conclusion

On the basis of this information, the following can be concluded about school district organization in Kentucky and, specifically, the number of small school districts in the state.

1. Kentucky operates substantially fewer school districts now than it did earlier in this century, in keeping with national trends.
2. Kentucky operates substantially fewer school districts on average than other states, in national and regional comparisons.
3. Kentucky operates a simple and optimal system of unified school districts, delivering educational services within coordinated K-12 systems which rest local control in single entities for the purposes of taxation, policy making, and administration.
4. Kentucky maintains average district sizes larger than two-thirds of the states. Most districts in Kentucky, however, serve 3,000 or fewer students.
5. Approximately two-thirds of Kentucky's school districts already match or exceed a general standard of "adequate" size.
6. Smaller districts compose either a third, an eighth, or a fourteenth of the state's total cohort of districts, depending on the definition of small that is applied. In the national context, Kentucky operates only 0.2% of all districts with fewer than 500 pupils. Regardless of the definition or number, Kentucky's smallest school districts most often are independent districts.

Does Kentucky have small school districts? Yes. The present analysis presented a means of determining approximately how many small school districts Kentucky operates. Does the state have too many small school districts? It has far fewer small school districts than two-thirds of the states. Other factors, however, must be considered in determining whether too many small districts exist, such as cost. The central policy question for the remainder of this paper regards whether these small school districts are more expensive for the state to maintain than other districts. In other words, is there a relationship between school district size and state educational costs in Kentucky? If so, are smaller districts more expensive for the state to operate?

3. DO SMALL SCHOOL DISTRICTS IN KENTUCKY COST THE STATE MORE TO OPERATE THAN LARGER DISTRICTS?

Governor Jones asked whether the state could save money by consolidating small school districts. Having defined "small" school districts, the analysis now turns directly to an examination of the relationship between district size and state educational costs in Kentucky.

Unit of Analysis and Intended Applications

The first important step in ascertaining whether small school districts cost the state more than larger districts is to clarify the research question before the Task Force. The question here asks about the relationship between state educational costs and district size. State educational cost, therefore, is the unit of analysis. State-level data are used in all calculations, and empirical results will address whether and the degree to which state educational costs vary with school district size. This state-level focus is clearly central to the concerns of state policy makers. It involves a question regarding the allocation of state educational resources to districts through the state school finance formula.

An analytic focus on state educational costs is different from a research undertaking that asks whether larger or smaller school districts operate more efficiently. Efficiency concerns, like those implicit in research on school size economies, are not synonymous with the narrower relationship between state costs and size. Efficiency necessarily involves an examination of costs and size in the context of educational outcomes, usually represented by student achievement scores. In other words, efficiency is enhanced if expenditures are reduced without a corresponding sacrifice in student achievement, or if achievement is enhanced without a corresponding increase in expenditures (Monk, 1990). Efficiency analysis involves an examination of the factors of production within school districts, such as the allocation of resources to administration, classroom teaching, support personnel (counselors, librarians, and the like), class sizes, teacher specialization, technology, and capital investments. Efficiency, therefore, involves district-level policy questions, requiring district-level cost and achievement data. Empirical results from such analyses address issues of local agency resource allocation, not state funding.

Three Kentucky studies reflect these different analytic orientations. Peyton and Brinly (1983), writing for the Legislative Research Commission, focused on district efficiencies and concluded that larger Kentucky school districts tended to be more efficient than smaller districts. Their conclusion was based on findings that smaller districts support proportionately larger administrative staffs and have smaller class sizes. Melton (1989), writing for the Task Force on School Finance, also found that small school districts, particularly those under 500 enrollment, are financially less efficient than their larger-district counterparts. Here again, the inefficiency of smaller districts was based on small districts' practices of supporting more administrators per pupil and maintaining lower student-teacher ratios.

In contrast, Scott (1989), representing the Kentucky School Boards Association, examined the relationship between district size and state plus local spending per pupil. He found the familiar U-shaped expenditure pattern, with the smallest (<600) and largest (>10,000) school districts spending more per pupil on average than medium sized districts. When local expenditures were factored out, however, the state expenditure pattern across districts became much flatter, indicating that much of the difference in district revenues can be accounted for by local effort.

Specifically, Scott found that the state spent, on average, $46 per pupil more in the 15 smallest school districts, an amount representing an increase in state educational costs of three-tenths of one standard deviation above the state average expenditure per pupil. Overall, Scott found a small negative correlation ($r = -.14$) between school district size and state per-pupil expenditures. He also found small and weak negative correlations between district size and student achievement scores on the Kentucky Essential Skills Test (KEST). Such small coefficients indicated that, after controlling for student socio-economic status, the size of school districts in Kentucky also is not related to student achievement. These data led Scott to argue that insufficient evidence existed to suggest significant economies of size in the state's school district organization. In the absence of a significant relationship between district size and state expenditures per pupil, Scott concluded that data "do not support the proposition of district mergers based on district size alone" (p. 30).

These Kentucky studies draw conclusions regarding the advisability of school district consolidation. But their different units of analysis, data bases, and decision criteria led them in opposite directions. Hence the importance of clarifying the research question and intended application of the present analysis. Like Scott's study, this analysis examines state-level data regarding school district size and state educational costs. It extends Scott's study by examining factors which contribute to greater or lesser state spending in Kentucky school districts.

Data Source and Variables

Data for this analysis were provided by the Legislative Research Commission. They included final calculations for the Support Education Excellence in Kentucky (SEEK) program and Tier 1—both central components of the state school finance formula—for the school year 1992-93. Categorical program support was added from a second data set which reported total state revenue receipts for each school district. Elements of the SEEK formula plus categorical aid encompass the components of state educational spending (hence, costs) in school districts.[5]

The measure of district size used here is average daily attendance (ADA). Measures of state educational costs included the following[6]:

[1] Adjusted 92-93 state SEEK funding = (ADA x base guarantee) + adjusted at-risk + adjusted home/hospital education + adjusted exceptional children + adjusted transportation - local contribution + adjusted Tier 1 - vocational education deduction + adjusted hold harmless - adjusted base prorata.

[2] State categorical aid = total state revenue receipts - adjusted 92-93 state SEEK funding.

[3] State educational costs = adjusted 92-93 state SEEK funding + state categorical aid.

Analytic Procedures

The analysis here is based on correlations between school district sizes and: (1) state educational costs and (2) district percentages of the variables of state educational costs, such as at-risk, exceptional children, and transportation. District percentages of total state costs for these variables were used instead of the variables themselves in order to correlate district size with the proportion of state spending on these cost variables across districts. A final correlation was calculated between state educational costs and local educational costs. Correlations measure the strength of linear association between quantitative variables, such as the size and cost data at issue here, without determining if one causes the other. Results are reported in terms of correlation coefficients (r), which vary between -1 and 1. The closer a coefficient is to -1 or 1, the closer the relationship between the variables reflects a straight line. If a correlation coefficient is positive, variables increase or decrease together; if negative, variables move inversely.

A second procedure involved coding the districts according to size categories. This allowed comparisons across categories of district size of various state educational cost factors.[7] This simple step contributed greatly to understanding factors that most affect state educational costs.

Empirical Results

Results from these analyses are presented in Tables 9-11. Table 10 holds the key information, but some calculations are required to get there. Table 9, for example, describes Kentucky's state educational costs per pupil. Several items are noteworthy. First, average state cost per pupil equals $3,102. This figure is close to the median cost of $3,076. This average cost per pupil equals approximately 128% of the state base guarantee. Second, state educational costs per pupil do vary, from a low of $2,022 to a high of $4,079. In other words, the highest-cost district receives slightly more than twice the amount of state aid as the lowest-cost district. Still, about two-thirds of the districts cost the state between approximately $2,719 and $3,485 per pupil. Interestingly, state aid for the six lowest-cost districts falls below the level of the base guarantee.

Thus, substantial (102%) variation in state educational costs exits across school districts. Is this variation related to district size? A correlation between district size and state educational costs yields a negative coefficient of -0.21 ($p >$ .004). Though small , the coefficient is significant, indicating that the relationship between size and cost is not due to chance. This indicates a need for further analysis.

Table 10 examines the size-cost relationship in another way, by cross tabulating categories of district size with average state educational costs. Five district size categories were selected: less than 800 students, 801 to 1,500 students, 1,501 to 3,307 students, 3,308 to 10,000 students, and greater than 10,000 students. Each of these break points is associated with numbers described earlier. For example, small districts of less than 800 students were considered likely candidates for consolidation by the Task Force on School Finance. Statutory and professional guidelines, though weak, indicated that 1,500 students composed the smallest adequately sized unified district. Mean district size in Kentucky equals 3,307 students, and districts with more than 10,000 students represent the very largest local agencies in the state. Row 1 in Table 10 indicates the number of school districts that fall into each size category. Rows 2 and 3, respectively, display total and mean enrollments in each category.

A relationship between school district size and mean state educational costs appears in Row 4 of Table 10, where average state costs per pupil decline from the smallest to the largest districts. Average state costs in the smallest districts are $552 per pupil greater than in the largest districts. Alternatively, average state costs in Kentucky's smallest school districts are about 21% higher than they are in the largest local agencies.

A key policy question arises here: are these state cost differences a function of district size or of some other factor?

District size, property wealth, and state educational costs. To explain why state educational costs are higher in small school districts, correlations were calculated for district size and the component variables in the state school finance formula (SEEK), plus categorical aid.[8] None of the coefficients is large. But among these, the largest and most significant involve two variables: Local Contribution and Tier 1.[9] This raises a question about the relationship between district size and district wealth, insofar as required local contributions to SEEK and state contributions to Tier 1 are calculated on the basis of districts' assessed property wealth.

Rows 5-9 in Table 10 describe the relationship between district size, property wealth, and state educational costs. Row 5 demonstrates what happens to mean state educational costs per pupil across districts of different size when district wealth is controlled. In short, when the influence of district wealth is removed, mean state educational costs per pupil vary by less than 3%, with larger districts costing the state on average $89 per pupil more than smaller districts. The

difference in mean state costs per pupil in districts up to 10,000 ADA equals $15. In districts larger than 10,000 ADA, mean state costs per pupil rise by another $74.

Row 6 in Table 10 demonstrates that local contributions to SEEK, which are based on district property wealth, are lowest in the smallest districts and increase with district size. The largest districts, in fact, contribute, on average, $329 per pupil or 85% more to SEEK than the smallest districts. Thus, average local contributions per pupil increase with district size, just as average state costs per pupil decrease with district size.

Row 7 in Table 10, representing average per-pupil state Tier 1 contributions, provides further evidence of how district wealth affects state educational costs. Here again, average state costs decrease as district size increases. This result is not surprising because the state provides equalization aid for Tier 1, thus guaranteeing that districts with per-pupil property wealth below 150% of the statewide average will be able to raise equal amounts of revenue per pupil with equal tax efforts beyond the required local effort. Districts with per-pupil property wealth above the 150% figure receive no Tier 1 assistance from the state. Hence the wealth-based variation in state support on this dimension.[10]

In fact, a correlation between local educational costs per pupil (defined as the required local contribution to SEEK divided by district size) and state educational costs per pupil yields a coefficient of -0.88, a high figure. This indicates that state educational costs and local educational costs vary inversely, and that more than three-quarters (78%) of all the variation in state educational costs is associated with differences in district contributions to SEEK. This inverse relationship is clearly seen by comparing Rows 4 and 6 in Table 10. Local contributions to SEEK are a function, by definition, of district property wealth.

If variation in state educational costs is a function of district property wealth, why, in Table 10, is there an apparent relation between district size and state educational costs? Variations in state educational costs appear across district sizes because size and total district property wealth are correlated ($r = 0.98$) as are district size and per-pupil property wealth, though not as strongly ($r = 0.31$). Row 8 in Table 10 demonstrates how average district property wealth per pupil increases as district size increases. Does this mean that all small districts are property poor while all large districts are property rich? No. Row 9 in Table 10 demonstrates the variation in district per-pupil property wealth within each district size category. This variation is wide, ranging within district size categories from roughly 300% to 900%. The widest variation, in fact, occurs in the smallest district size category.

Another way to see the relationships among district size and district wealth is to examine state rankings of school districts in terms of state educational costs and district property wealth. Table 11 does this for the 15 most costly districts and 15 least costly districts. In terms of state educational costs, 9 of the 15 least costly school districts also are among the 15 most wealthy districts. Conversely, 10 of the 15 most costly school districts also are among the 15 least wealthy districts. Thus,

in large measure the state's costliest districts are among its poorest, and its least costly districts are among its richest, with rich and poor defined in terms of pupil property wealth.[11]

The conclusion that should be drawn from this analysis is that variations in state educational costs in Kentucky are the result primarily of differences in school district property wealth, not district size. In fact, the state base guarantee per pupil is the same regardless of district size. That is, the state's base educational cost per pupil is exactly the same in a 10,000-student district as it is in a 500-student district: $2,420. The base guarantee thus sets the standard for state educational costs. Logically, size does not cause wealth. But increasing district wealth does cause local contributions to SEEK to increase, and these contributions lower the amount of state aid in these districts. District contributions to SEEK, in fact, vary from approximately $47,000 to $75 million. It happens in Kentucky that size and wealth also are related. By statutory definition, however, the determining factors in state educational costs in Kentucky are the level of the base guarantee and school district property wealth.

Discussion

The finding that variation in state educational costs is related to school district property wealth is not surprising given the state's school finance reform focus on equalizing state aid to school districts. The SEEK formula was designed specifically to be more responsive to differences in district wealth. The state's goal is to reduce funding disparities among the districts, of the type that led the state Supreme Court to declare the prior school finance formula—and the system it supported—to be unconstitutional (Rose, 1989). Findings in the present analysis demonstrate, three years into school reform, that variations in state educational costs occur just as the state intended: on the basis of district property wealth.

Do small school districts cost more to operate than large districts, in terms of state costs? On average, yes, though not on a case-by-case basis. Can the state save money by consolidating small school districts? The data here indicate that, no, the state cannot save money by consolidating small school districts. Why? Because state educational costs are driven by school district property wealth, not size. District wealth causes varying amounts of local revenue to be contributed to SEEK, and these amounts are associated the variations in state educational costs across school districts. The burden of school finance equalization falls on the state, and the effect is apparent in state spending on elementary and secondary education.

Conclusion

On the basis of information in this section, the following can be concluded about school district size and state educational costs in Kentucky.

1. State educational costs vary from a low of $2,022 to a high of $4,079. About two-thirds of Kentucky school districts cost the state between approximately $2,719 and $3,485 per pupil.
2. Without controlling for district property wealth, a relationship between school district size categories (<800; 801-1,500; 1,501-3,307; 3,308-10,000; and >10,000) and average state educational costs is apparent, where average state costs per pupil decline as district size categories increase.
3. When the influence of district property wealth is removed, average state educational costs per pupil vary by less than 3%, with larger districts costing up to $89 per pupil more.
4. School finance factors that most affect state educational cots include local contributions to SEEK and state contributions to Tier 1. Both local contributions to SEEK and state aid in Tier 1 are a function of school district property wealth.
5. A correlation between local per-pupil contributions to SEEK and state per-pupil educational costs yields a coefficient of -0.88, a high figure. This indicates that state educational costs and local educational costs are inversely related, and that about 78% of all the variation in state educational costs are associated with differences in school district wealth.
6. The state base guarantee per pupil is the same regardless of district size. School district contributions to SEEK, however, vary from approximately $47,000 to $75 million.
7. It happens in Kentucky that school district size is associated with district wealth. By statutory definition, however, the determining factor in state educational costs in Kentucky is school district property wealth, not size.
8. The important relationship between school district wealth and state educational costs reflects the state's effort to equalize funding across school districts. The state school finance formula is working as intended.
9. Kentucky cannot save educational costs by consolidating small school districts.

4. ARE STATE EDUCATIONAL COSTS ALONE ADEQUATE TO JUDGE THE UTILITY OF CONSOLIDATING SMALL SCHOOL DISTRICTS?

The analysis here demonstrates that state educational costs are driven by the amount of basic state support per pupil (the base guarantee) and variations in local contributions to SEEK which fluctuate based on district property wealth. These data address a state-level concern regarding state educational costs and school district size.

Other considerations typically arise in a discussion of small district consolidation, which expand the context of district consolidation beyond the boundaries prescribed in the present analysis. These issues include the efficiency of smaller districts, student achievement, community identity, and district operations. Each is described briefly below. In brief, educational research and practice indicate that the promised benefits of school consolidation almost never materialize, and that larger units of schooling, whether schools or districts, are more likely to harm rather than aid student achievement. As a policy initiative, school district consolidation is hard to support on either economic or educational grounds. Can steps short of consolidation be taken to improve the efficiency of school districts? Of course. These steps involve the allocation of resources within school districts and the conduct of district operations.

School District Efficiency

The question of school district efficiency is separate from the relationship between district size and state educational costs. The differences were discussed earlier. Efficiency analyses examine the relationship among school district size, the allocation of district resources, and student achievement. As noted earlier, a substantial body of educational research on district efficiency, or size economies, has been unsuccessful in its bid to identify an optimally efficient school district size (Fox, 1981; Monk, 1990, for example). Size economies do appear to exist across a range of student populations, but optimal district size varies widely, from 675 to 51,000 students (Fox, 1981)—too wide a range to be useful for policy making. Bilow (1986) similarly found that size economies exist in education, as do diseconomies, but the point where one overtakes the other is unclear.

In terms of the cost-savings potential of district consolidation, little evidence exists that consolidation substantially reduces district costs (or educational gains) (Guthrie, 1979). One study, in fact, estimated cost savings from rural consolidation to be only 1.3% of annual schooling and transportation costs (White & Tweeten, 1973). A recent assessment concluded that "it would be erroneous to imply that gross reductions in numbers [of school districts] automatically result in better district organization. Obviously this is not true; many consolidations of small, poor, inefficient districts have resulted in larger, poor, inefficient districts" (Campbell, Cunningham, Nystrand, & Usdan, 1985, p. 87).

Student Achievement

Educational costs compose only one dimension of district consolidation. Educational achievement marks another, centrally important dimension, particularly as local agencies are in the business of fostering student learning. On this dimension, educational research is less sanguine about the effects of district consolidation. For example, Guthrie (1979) found no definitive study that supported the notion that students perform better in bigger environments. Walberg and Fowler (1987) demonstrated that district size was inversely associated with student test scores. Friedkin and Necochea (1988) similarly concluded that school system size has strong negative effects on student performance, except in high SES settings. A reasonable conclusion to draw from these studies is that "it is the educational policies of districts and instructional practices in classrooms rather than expenditures [which entail size] that consistently determine achievement and efficiency" (Walberg & Fowler, 1987, p. 13).

Community Identity

School districts constitute the form of American government closest to its constituents. Schools, moreover, often serve as centers of community activity and are symbolic of community identity. In this context, school district consolidation can have an adverse impact on community morale and participation in local government. Sher and Tompkins (1977), in fact, argued that high schools in small rural settings are integrated closely into the fabric of community life, that communities and schools are mutually reinforcing, and that removing a school from such a community through consolidation would be destructive of the community itself. Promoting, or not adversely affecting, community identity thus becomes an important consideration in consolidation scenarios.

No single factor, however, defines community identity. California statutes are illustrative. They define communities in terms of geography; degree of isolation; distances between social centers; distances between school centers; topography; weather; and community, school, and social ties. Other attributes that may be useful in defining communities include homogenous or consistent housing developments, usage patterns of parks and public transportation centers, political boundaries, and regional shopping patterns (California Education Code, Section 35753(c)).

Operational Factors

Apart from the principal issues related to school district consolidation—cost, educational quality, and community identity—a number of smaller, operational considerations are noteworthy. Reorganization, for example, should result in an equitable division of property and facilities of the original districts. Reorganization should not result in a significant increase in school housing costs, nor should it be designed primarily to increase property values. Finally, reorganization should not negatively affect the fiscal status of districts, in terms of their abilities to practice sound fiscal management and meet all obligations. Another

important concern relates to the distances student must travel to reach schools. Long bus rides can be boring and fatiguing and, thus, have a detrimental effect on students' motivation to attend school and to excel.

Enhancing Local Efficiency

In the face of substantial questions regarding the efficacy of school district consolidation to effect school district cost savings or improvements in student performance, is it plausible to seek greater efficiencies in school district operations? Obviously, yes. Efficiencies can be gained through a number of practices, primarily by reorganization mechanisms short of consolidation, reallocation of district resources, and improved efficiency in district operations.

Several reorganization strategies short of district consolidation are available to governing boards. These include open enrollment zones, boundary changes, grade configuration changes, and interdistrict cooperation. In turn, interdistrict cooperation covers two domains of activities: instruction, including items such as instructional offerings, curriculum planning, educational technology, and staff development; and business practices, such as purchasing, payroll processing, maintenance, security, and transportation. Economies of scale may be realized within and across these areas by two or more districts entering into joint ventures. In this regard organizational arrangements that facilitate such economies encompass district-to-district relationships or associations of districts connected through regional consortia or service centers (Adams, Hayward, Shimasaki, & Guthrie, 1991).

In the area of resource allocation, efficiencies may be found by altering teacher-pupil ratios, promoting teacher specialization, minimizing resources devoted to administration, utilizing space better, and reducing prices paid for the materials or services used in the "production" of learning (through competitive selection or bulk purchasing). Resource allocations also may change as a result of strategic planning processes, which clarify the mission of a school district, thus enabling expenditures to be focused only on central components of that mission.

Two large-scale changes promise greater efficiencies in district operations but currently are far from developed. These include linking school finance and school reform more closely, in order to achieve the tandem goals of efficiency and excellence (Verstegen & McGuire, 1988); and developing program-based educational budgeting and accounting systems, in order to enhance educational accountability, rather than the more common audit-based accountability (Adams, 1993b, for example).

The above suggestions simply illustrate types of activities available to school districts that may link and streamline educational resources and services and, in the process, perhaps, increase the focus and power of their educational missions. Exploring these and similar activities demands a district-level policy focus and district-level data. They promise results applicable to the allocation of resources within the state's school districts.

In sum, school district consolidation is problematic on a number of key dimensions, including cost efficiency, educational achievement, and community identity. However, there are a number of strategies school districts can employ, alone or together, any of these activities is consistent with the wise use of educational resources. In so doing, districts may find opportunities to affirm or reinvent their missions, pursue efficiency and excellence, and strengthen ties to their local communities.

Regarding consolidation as a policy strategy designed to save money or to promote student learning, the best final analysis was offered by Monk (1990). After an extensive review of the research on size economies in education, Monk concluded that there is no single best way to produce a given set of outcomes in education. Given this uncertainty, enhancing educational outcomes becomes a matter of holding decision makers accountable for results while fostering flexibility in how these outcomes are pursued. School district size may be one component of this multifaceted strategy. It is not the only one, nor is it a crucial one. More important are factors that enhance classroom interactions among teachers, students, and instructional materials. Teaching and learning remain the central tasks in education. Kentucky is now in the midst of a systemic reform effort tied to changes in finance, curriculum, instruction, and student achievement. That effort promises greater efficiency in promoting student learning across the Commonwealth.

Conclusion

On the basis of the information in this section, the following can be concluded about school district consolidation and school district operational efficiencies.

1. Costs alone do not represent the full range of important considerations associated with school district consolidation. Other factors include student achievement, community identity, and district operations.
2. The research literature regarding consolidation and student achievement indicates that student achievement seldom is enhanced and sometimes is harmed by schooling children in larger educational units.
3. Schools and districts often serve as centers of community activity and symbols of community identity. Loss of citizen-government connections through consolidation may be harmful to public participation in and commitment to public schools.
4. Though consolidation is problematic in terms of effecting cost savings and promoting educational achievement, numerous strategies are available to school districts to pursue technical efficiencies in district operations. Examples include reorganization activities short of consolidation, reallocation of district resources, and improved efficiencies in district operations.
5. Enhancing educational outcomes is a matter of holding decision makers accountable while fostering flexibility in how outcomes are pursued.

School district size may be one component of a multifaceted strategy. It is not the only one, nor is it a crucial one.

NOTES

[1]The definition of county and independent school districts is governed by Kentucky School Laws, Chapter 160, sections 160.010 and 160.020.

[2]Average daily attendance (ADA) is a common method of measuring school district size and providing financial resources to districts. ADA is calculated as the aggregate student-days of attendance in a district during a reporting period, divided by the number of days in that reporting period. Importantly, state educational dollars in Kentucky are allocated on the basis of ADA. Thus, ADA is the appropriate measure to use for within-state comparisons of district size and cost-size analyses. Readers should note, however, that within-state comparisons and cross-state comparisons (the tables of national rankings) of district size in this paper are based on different measures: ADA and enrollment, respectively. Full enrollment equals the total of all students present at least one day during a school year. ADA always represents a smaller number of students than enrollment. For instance, during the 1990-91 school year, state ADA in Kentucky equaled 88.05% of the enrollment figure (Kentucky Department of Education, 1991). In 1992-93, average district size in Kentucky in terms of ADA was 91.5% of the mean enrollment figure. This explains the difference, for example, in the way I report average district size in Kentucky: 3,307 based on ADA and 3,616 based on enrollment. Cross-state comparisons were not available in units of ADA.

[3]A U-shaped average cost curve indicates that average per-pupil costs decline as district size increases, up to a point. Beyond this point, average per-pupil costs increase as district size increases. The bottom of the U-shaped curve indicates an optimal mix of cost and size.

[4]Percentage of districts is a better measure than the number of districts because it provides a standard measure of school district organization regardless of the number of districts a state may have, which may be a function simply of total state enrollment ($r = 0.69$ for correlation between number of school districts nationwide and total state enrollments).

[5]These data exclude funds for the School Facilities Construction Commission, which is used for debt service; teacher retirement funds; health insurance; and the general fund for the state department of education, which includes operating funds for the state schools for the deaf and blind. Local revenues (costs) not associated with state spending, such as Tier 2 receipts, rentals, and reimbursements also were excluded because the policy issue here focuses only on the expenditure of state funds.

[6]Regarding these cost equations, the base guaranteed amount per pupil was $2,420. Adjustments on variables occurred because the state funded less than 100% of its calculated cost on these items. SEEK requires a local contribution of 30¢ per $100 of assessed property wealth. Tier 1 allows districts to augment their adjusted base guarantee. Local taxes can be levied by a vote of the school board

which raise additional revenues up to 15% of the district adjusted base guarantee. Districts with property wealth below 150% of the statewide per-pupil property value ($280,000) receive state equalization funds in Tier 1. The vocational education deduction relates to the portion of time each day that students spend in state-supported vocational education schools, which are operated by a different state government cabinet. The hold harmless provision guarantees that districts will receive no less revenue in one year than it did in the prior year. The base prorata involves a budget cut to education.

[7]A least squares regression analysis of state educational costs on school district size provided no useful information. Because the school finance formula clearly specifies all the variables that affect state educational costs, the formula itself accounts for all variation in state costs. (For example, the regression yielded an R^2 of 1.00 with a parameter estimate of ADA of 2,420, the amount of the per-pupil base guarantee, just as one would expect.)

[8]Correlations of state cost factors with district size (p values in parentheses) include the following: base, 0.21 (0.0048); at-risk, 0.00 (0.9954); home/hospital, -0.00 (0.9898); exceptional child, 0.14 (0.0611); transportation, 0.18 (0.0184); local contribution, 0.29 (0.0001); Tier 1, -0.26 (0.0005); vocational education deduction, -0.08 (2925); hold harmless, 0.13 (0.0828); prorata, 0.17 (0.0283); and categorical aid, -0.10 (0.2072).

[9]The correlation coefficient for the base guarantee is similarly large and also significant, but it is uninteresting because we know that each pupil receives the same amount of state support: $2,420.

[10]District property wealth varies across the district size categories used in Table 10 in the following manner: for districts of less than 800 pupils, property wealth equals $1.4 billion; for districts of 801-1,500 pupils, $6.1 billion; for districts of 1,501-3,307 students, $20.1 billion; for districts of 3,308-10,000 pupils, $37.8 billion; for districts of more than 10,000 students, $41.7 billion.

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TABLE 1
National Rankings, Number of School Districts (Kentucky highlighted)

RANK	STATE	TOTAL DIST	DIST >1,500	%>1,500	DIST <500	%<500	TOTAL ENROL	MEAN ENROL
1	HI	1	1	100.00%	0	0.00%	171,708	171,708
2	NV	17	11	64.71%	3	17.65%	201,316	11,842
3	DE	19	16	84.21%	2	10.53%	99,658	5,245
4	MD	24	24	100.00%	0	0.00%	715,176	29,799
5	RI	37	29	78.38%	3	8.11%	138,813	3,752
6	UT	40	29	72.50%	3	7.50%	447,891	11,197
7	WY	49	18	36.73%	13	26.53%	98,226	2,005
8	WV	55	50	90.91%	0	0.00%	322,389	5,862
9	AK	55	10	18.18%	34	61.82%	113,874	2,074
10	LA	66	66	100.00%	0	0.00%	784,757	11,890
11	FL	67	64	95.52%	0	0.00%	1,861,592	27,785
12	NM	88	36	40.91%	31	35.23%	301,881	3,430
13	SC	95	71	74.74%	3	3.16%	622,112	6,549
14	ID	112	41	36.61%	37	33.04%	220,840	1,972
15	AL	130	118	90.77%	2	1.54%	721,806	5,552
16	NC	134	126	94.03%	0	0.00%	1,086,871	8,111
17	TN	140	105	75.00%	5	3.57%	824,595	5,890
18	VA	144	107	74.31%	5	3.47%	998,601	6,935
19	MS	151	118	78.15%	2	1.32%	502,417	3,327
20	NH	162	38	23.46%	83	51.23%	172,785	1,067
21	CT	166	91	54.82%	31	18.67%	469,123	2,826
22	KY	176	120	68.18%	11	6.25%	636,401	3,616
23	CO	179	51	28.49%	90	50.28%	574,213	3,208
24	SD	179	15	8.38%	124	69.27%	129,164	722
25	GA	185	154	83.24%	8	4.32%	1,151,687	6,225
26	AZ	217	75	34.56%	90	41.47%	639,853	2,949
27	ME	228	50	21.93%	119	52.19%	215,149	944
28	ND	265	11	4.15%	230	86.79%	117,825	445
29	MA	279	157	56.27%	60	21.51%	834,314	2,990
30	WA	297	113	38.05%	109	36.70%	839,709	2,827
31	VT	298	13	4.36%	217	72.82%	95,762	321
32	OR	299	73	24.41%	160	53.51%	484,652	1,621
33	KS	304	55	18.09%	129	42.43%	437,034	1,438
34	IN	306	191	62.42%	17	5.56%	954,581	3,120
35	AR	330	72	21.82%	116	35.15%	436,286	1,322
36	WI	428	126	29.44%	96	22.43%	797,621	1,864
37	MN	428	106	24.77%	173	40.42%	1,581,925	3,696
38	IA	431	70	16.24%	191	44.32%	483,652	1,122
39	PA	503	367	72.96%	9	1.79%	1,667,834	3,316
40	MT	531	15	2.82%	469	88.32%	152,974	288
41	MO	542	123	22.69%	256	47.23%	812,234	1,499
42	MI	563	294	52.22%	83	14.74%	756,374	1,343
43	NJ	579	206	35.58%	175	30.22%	1,089,646	1,882
44	OK	595	69	11.60%	389	65.38%	579,087	973
45	OH	612	356	58.17%	14	2.29%	1,771,516	2,895
46	NY	719	347	48.26%	112	15.58%	2,589,337	3,601
47	NE	782	25	3.20%	702	89.77%	274,081	350
48	IL	952	250	26.26%	327	34.35%	1,821,407	1,913
49	TX	1,053	357	33.90%	392	37.23%	3,382,887	3,213
50	CA	1,066	494	46.34%	363	34.05%	4,950,474	4,644
	TOTAL	15,078	5,524	na	5,488	na	41,134,110	na
	MEAN	302	110	na	110	na	822,682	2,728

SOURCE: U.S. Department of Education, National Center for Education Statistics (1990/91 School Year) and CIC School Directory (Market Data Retrieval, Inc., Shelter, CT.).

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TABLE 2
National Rankings, School Enrollments (Kentucky highlighted)

RANK	STATE	TOTAL DIST	DIST >1,500	%>1,500	DIST <500	%<500	TOTAL ENROL	MEAN ENROL
1	VT	298	13	4.36%	217	72.82%	95,762	321
2	WY	49	18	36.73%	13	26.53%	98,226	2,005
3	DE	19	16	84.21%	2	10.53%	99,658	5,245
4	AK	55	10	18.18%	34	61.82%	113,874	2,074
5	ND	265	11	4.15%	230	86.79%	117,825	445
6	SD	179	15	8.38%	124	69.27%	129,164	722
7	RI	37	29	78.38%	3	8.11%	138,813	3,752
8	MT	531	15	2.82%	469	88.32%	152,974	288
9	HI	1	1	100.00%	0	0.00%	171,708	171,708
10	NH	162	38	23.46%	83	51.23%	172,785	1,067
11	NV	17	11	64.71%	3	17.65%	201,316	11,842
12	ME	228	50	21.93%	119	52.19%	215,149	944
13	ID	112	41	36.61%	37	33.04%	220,840	1,972
14	NE	782	25	3.20%	702	89.77%	274,081	350
15	NM	88	36	40.91%	31	35.23%	301,881	3,430
16	WV	55	50	90.91%	0	0.00%	322,389	5,862
17	AR	330	72	21.82%	116	35.15%	436,286	1,322
18	KS	304	55	18.09%	129	42.43%	437,034	1,438
19	UT	40	29	72.50%	3	7.50%	447,891	11,197
20	CT	166	91	54.82%	31	18.67%	469,123	2,826
21	IA	431	70	16.24%	191	44.32%	483,652	1,122
22	OR	299	73	24.41%	160	53.51%	484,652	1,621
23	MS	151	118	78.15%	2	1.32%	502,417	3,327
24	CO	179	51	28.49%	90	50.28%	574,213	3,208
25	OK	595	69	11.60%	389	65.38%	579,087	973
26	SC	95	71	74.74%	3	3.16%	622,112	6,549
27	KY	176	120	68.18%	11	6.25%	636,601	3,616
28	AZ	217	75	34.56%	90	41.47%	639,853	2,949
29	MD	24	24	100.00%	0	0.00%	715,176	29,799
30	AL	130	118	90.77%	2	1.54%	721,806	5,552
31	MI	563	294	52.22%	83	14.74%	756,374	1,343
32	LA	66	66	100.00%	0	0.00%	784,757	11,890
33	WI	428	126	29.44%	96	22.43%	797,621	1,864
34	MO	542	123	22.69%	256	47.23%	812,234	1,499
35	TN	140	105	75.00%	5	3.57%	824,595	5,890
36	MA	279	157	56.27%	60	21.51%	834,314	2,990
37	WA	297	113	38.05%	109	36.70%	839,709	2,827
38	IN	306	191	62.42%	17	5.56%	954,581	3,120
39	VA	144	107	74.31%	5	3.47%	998,601	6,935
40	NC	134	126	94.03%	0	0.00%	1,086,871	8,111
41	NJ	579	206	35.58%	175	30.22%	1,089,646	1,882
42	GA	185	154	83.24%	8	4.32%	1,151,687	6,225
43	MN	428	106	24.77%	173	40.42%	1,581,925	3,696
44	PA	503	367	72.96%	9	1.79%	1,667,834	3,316
45	OH	612	356	58.17%	14	2.29%	1,771,516	2,895
46	IL	952	250	26.26%	327	34.35%	1,821,407	1,913
47	FL	67	64	95.52%	0	0.00%	1,861,592	27,785
48	NY	719	347	48.26%	112	15.58%	2,589,337	3,601
49	TX	1,053	357	33.90%	392	37.23%	3,382,887	3,213
50	CA	1,066	494	46.34%	363	34.05%	4,950,474	4,644
	TOTAL	15,078	5,524	na	5,488	na	41,134,110	393,165
	MEAN	302	110	na	110	na	822,682	2,728

SOURCE: U.S. Department of Education, National Center for Education Statistics (1990/91 School Year) and CIC School Directory (Market Data Retrieval, Inc., Shelter, CT.).

TABLE 3
National Rankings, Average District Size (Kentucky highlighted)

RANK	STATE	TOTAL DIST	DIST >1,500	%>1,500	DIST <500	%<500	TOTAL ENROL	MEAN ENROL
1	MT	531	15	2.82%	469	88.32%	152,974	288
2	VT	298	13	4.36%	217	72.82%	95,762	321
3	NE	782	25	3.20%	702	89.77%	274,081	350
4	ND	265	11	4.15%	230	86.79%	117,825	445
5	SD	179	15	8.38%	124	69.27%	129,164	722
6	ME	228	50	21.93%	119	52.19%	215,149	944
7	OK	595	69	11.60%	389	65.38%	579,087	973
8	NH	162	38	23.46%	83	51.23%	172,785	1,067
9	IA	431	70	16.24%	191	44.32%	483,652	1,122
10	AR	330	72	21.82%	116	35.15%	436,286	1,322
11	MI	563	294	52.22%	83	14.74%	756,374	1,343
12	KS	304	55	18.09%	129	42.43%	437,034	1,438
13	MO	542	123	22.69%	256	47.23%	812,234	1,499
14	OR	299	73	24.41%	160	53.51%	484,652	1,621
15	WI	428	126	29.44%	96	22.43%	797,621	1,864
16	NJ	579	206	35.58%	175	30.22%	1,089,646	1,882
17	IL	952	250	26.26%	327	34.35%	1,821,407	1,913
18	ID	112	41	36.61%	37	33.04%	220,840	1,972
19	WY	49	18	36.73%	13	26.53%	98,226	2,005
20	AK	55	10	18.18%	34	61.82%	113,874	2,074
21	CT	166	91	54.82%	31	18.67%	469,123	2,826
22	WA	297	113	38.05%	109	36.70%	839,709	2,827
23	OH	612	356	58.17%	14	2.29%	1,771,516	2,895
24	AZ	217	75	34.56%	90	41.47%	639,853	2,949
25	MA	279	157	56.27%	60	21.51%	834,314	2,990
26	IN	306	191	62.42%	17	5.56%	954,581	3,120
27	CO	179	51	28.49%	90	50.28%	574,213	3,208
28	TX	1,053	357	33.90%	392	37.23%	3,382,887	3,213
29	PA	503	367	72.96%	9	1.79%	1,667,834	3,316
30	MS	151	118	78.15%	2	1.32%	502,417	3,327
31	NM	88	36	40.91%	31	35.23%	301,881	3,430
32	NY	719	347	48.26%	112	15.58%	2,589,337	3,601
33	KY	176	120	68.18%	11	6.25%	636,401	3,615
34	MN	428	106	24.77%	173	40.42%	1,581,925	3,696
35	RI	37	29	78.38%	3	8.11%	138,813	3,752
36	CA	1,066	494	46.34%	363	34.05%	4,950,474	4,644
37	DE	19	16	84.21%	2	10.53%	99,658	5,245
38	AL	130	118	90.77%	2	1.54%	721,806	5,552
39	WV	55	50	90.91%	0	0.00%	322,389	5,862
40	TN	140	105	75.00%	5	3.57%	824,595	5,890
41	GA	185	154	83.24%	8	4.32%	1,151,687	6,225
42	SC	95	71	74.74%	3	3.16%	622,112	6,549
43	VA	144	107	74.31%	5	3.47%	998,601	6,935
44	NC	134	126	94.03%	0	0.00%	1,086,871	8,111
45	UT	40	29	72.50%	3	7.50%	447,891	11,197
46	NV	17	11	64.71%	3	17.65%	201,316	11,842
47	LA	66	66	100.00%	0	0.00%	784,757	11,890
48	FL	67	64	95.52%	0	0.00%	1,861,592	27,785
49	MD	24	24	100.00%	0	0.00%	715,176	29,799
50	HI	1	1	100.00%	0	0.00%	171,708	171,708
	TOTAL	15,078	5,524	na	5,488	na	41,134,110	393,165
	MEAN	302	110	na	110	na	822,682	2,728

SOURCE: U.S. Department of Education, National Center for Education Statistics (1990/91 School Year) and CIC School Directory (Market Data Retrieval, Inc., Shelter, CT.).

TABLE 4
Frequency of School District Sizes, by Average Daily Attendance (ADA), 1992-93

District Size	No. Districts	% Districts	No. ADA	% ADA	
<1,000	41	23.30	26,975.0	4.63	
1,000-2,000	43	24.43	66,378.1	11.40	1/3 ADA
2,001-3,000	40	22.73	100,162.0	17.21	
3,001-4,000	18	10.23	63,281.7	10.87	
4,001-5,000	11	6.25	48,523.1	8.34	
5,001-6,000	5	2.84	27,449.7	4.72	1/3 ADA
6,001-7,000	3	1.70	19,500.1	3.35	
7,001-8,000	4	2.27	30,001.9	5.15	
8,001-9,000	2	1.14	16,686.4	2.87	
9,001-10,000	4	2.27	37,185.6	6.39	1/3 ADA
>10,000	5	2.84	145,909.9	25.07	
TOTALS	176	100.00	582,053.5	100.00	

SOURCE: Based on data from Legislative Research Commission.

TABLE 5
Independent and County Districts Compared, 1992-93

Factor	Independent Districts	County Districts	All Districts	
Number	56	120	176	
Mean*	1,253	4,266	na	
Median	891	2,634	na	
Smallest	191	324	na	
Largest	4,918	81,523	na	
ADA	70,165	511,888	582,053	
% ADA	12.05	87.95	100	
Number of districts by size*				
<500	11	1	12	63 districts <1,500
501-1500	30	21	51	
1501-3307†	11	53	64	
3308-5000	4	22	26	
5001-10,000	0	18	18	113 districts >1,500
>10,000	0	5	5	
TOTAL	56	120	176	

* All sizes in average daily attendance (ADA).
† This number is the mean size of all school districts in Kentucky.

SOURCE: Based on data from Legislative Research Commission.

TABLE 6
National Rankings, Percentage of Districts >1,500 Pupils (Kentucky highlighted)

RANK	STATE	TOTAL DIST	DIST >1,500	%>1,500	DIST <500	%<500	TOTAL ENROL	MEAN ENROL
1	MT	531	15	2.82%	469	88.32%	152,974	288
2	NE	782	25	3.20%	702	89.77%	274,081	350
3	ND	265	11	4.15%	230	86.79%	117,825	445
4	VT	298	13	4.36%	217	72.82%	95,762	321
5	SD	179	15	8.38%	124	69.27%	129,164	722
6	OK	595	69	11.60%	389	65.38%	579,087	973
7	IA	431	70	16.24%	191	44.32%	483,652	1,122
8	KS	304	55	18.09%	129	42.43%	437,034	1,438
9	AK	55	10	18.18%	34	61.82%	113,874	2,074
10	AR	330	72	21.82%	116	35.15%	436,286	1,322
11	ME	228	50	21.93%	119	52.19%	215,149	944
12	MO	542	123	22.69%	256	47.23%	812,234	1,499
13	NH	162	38	23.46%	83	51.23%	172,785	1,067
14	OR	299	73	24.41%	160	53.51%	484,652	1,621
15	MN	428	106	24.77%	173	40.42%	1,581,925	3,696
16	IL	952	250	26.26%	327	34.35%	1,821,407	1,913
17	CO	179	51	28.49%	90	50.28%	574,213	3,208
18	WI	428	126	29.44%	96	22.43%	797,621	1,864
19	TX	1,053	357	33.90%	392	37.23%	3,382,887	3,213
20	AZ	217	75	34.56%	90	41.47%	639,853	2,949
21	NJ	579	206	35.58%	175	30.22%	1,089,646	1,882
22	ID	112	41	36.61%	37	33.04%	220,840	1,972
23	WY	49	18	36.73%	13	26.53%	98,226	2,005
24	WA	297	113	38.05%	109	36.70%	839,709	2,827
25	NM	88	36	40.91%	31	35.23%	301,881	3,430
26	CA	1,066	494	46.34%	363	34.05%	4,950,474	4,644
27	NY	719	347	48.26%	112	15.58%	2,589,337	3,601
28	MI	563	294	52.22%	83	14.74%	756,374	1,343
29	CT	166	91	54.82%	31	18.67%	469,123	2,826
30	MA	279	157	56.27%	60	21.51%	834,314	2,990
31	OH	612	356	58.17%	14	2.29%	1,771,516	2,895
32	IN	306	191	62.42%	17	5.56%	954,581	3,120
33	NV	17	11	64.71%	3	17.65%	201,316	11,842
34	KY	176	120	68.18%	11	6.25%	636,401	3,616
35	UT	40	29	72.50%	3	7.50%	447,891	11,197
36	PA	503	367	72.96%	9	1.79%	1,667,834	3,316
37	VA	144	107	74.31%	5	3.47%	998,601	6,935
38	SC	95	71	74.74%	3	3.16%	622,112	6,549
39	TN	140	105	75.00%	5	3.57%	824,595	5,890
40	MS	151	118	78.15%	2	1.32%	502,417	3,327
41	RI	37	29	78.38%	3	8.11%	138,813	3,752
42	GA	185	154	83.24%	8	4.32%	1,151,687	6,225
43	DE	19	16	84.21%	2	10.53%	99,658	5,245
44	AL	130	118	90.77%	2	1.54%	721,806	5,552
45	WV	55	50	90.91%	0	0.00%	322,389	5,862
46	NC	134	126	94.03%	0	0.00%	1,086,871	8,111
47	FL	67	64	95.52%	0	0.00%	1,861,592	27,785
48	HI	1	1	100.00%	0	0.00%	171,708	171,708
49	MD	24	24	100.00%	0	0.00%	715,176	29,799
50	LA	66	66	100.00%	0	0.00%	784,757	11,890
	TOTAL	15,078	5,524	na	5,488	na	41,134,110	na
	MEAN	302	110	na	110	na	822,682	2,728

SOURCE: U.S. Department of Education, National Center for Education Statistics (1990/91 School Year) and CIC School Directory (Market Data Retrieval, Inc., Shelter, CT.).

TABLE 7
Number of "Small" School Districts in Kentucky, 1992-93

District Size	No. Districts	% All Districts
<1,500*	63	35.80
<800	23	13.07
<500	12	6.82

*All sizes in average daily attendance (ADA).

SOURCE: Based on data from the Legislative Research Commission.

TABLE 8
National Rankings, Percentage of Districts <500 Pupils (Kentucky highlighted)

RANK	STATE	TOTAL DIST	DIST >1,500	%>1,500	DIST <500	%<500	TOTAL ENROL	MEAN ENROL
1	WV	55	50	90.91%	0	0.00%	322,389	5,862
2	NC	134	126	94.03%	0	0.00%	1,086,871	8,111
3	FL	67	64	95.52%	0	0.00%	1,861,592	27,785
4	HI	1	1	100.00%	0	0.00%	171,708	171,708
5	MD	24	24	100.00%	0	0.00%	715,176	29,799
6	LA	66	66	100.00%	0	0.00%	784,757	11,890
7	MS	151	118	78.15%	2	1.32%	502,417	3,327
8	AL	130	118	90.77%	2	1.54%	721,806	5,552
9	PA	503	367	72.96%	9	1.79%	1,667,834	3,316
10	OH	612	356	58.17%	14	2.29%	1,771,516	2,895
11	SC	95	71	74.74%	3	3.16%	622,112	6,549
12	VA	144	107	74.31%	5	3.47%	998,601	6,935
13	TN	140	105	75.00%	5	3.57%	824,595	5,890
14	GA	185	154	83.24%	8	4.32%	1,151,687	6,225
15	IN	306	191	62.42%	17	5.56%	954,581	3,120
16	KY	176	120	68.18%	11	[illegible]	636,401	3,616
17	UT	40	29	72.50%	3	7.50%	447,891	11,197
18	RI	37	29	78.38%	3	8.11%	138,813	3,752
19	DE	19	16	84.21%	2	10.53%	99,658	5,245
20	MI	563	294	52.22%	83	14.74%	756,374	1,343
21	NY	719	347	48.26%	112	15.58%	2,589,337	3,601
22	NV	17	11	64.71%	3	17.65%	201,316	11,842
23	CT	166	91	54.82%	31	18.67%	469,123	2,826
24	MA	279	157	56.27%	60	21.51%	834,314	2,990
25	WI	428	126	29.44%	96	22.43%	797,621	1,864
26	WY	49	18	36.73%	13	26.53%	98,226	2,005
27	NJ	579	206	35.58%	175	30.22%	1,089,646	1,882
28	ID	112	41	36.61%	37	33.04%	220,840	1,972
29	CA	1,066	494	46.34%	363	34.05%	4,950,474	4,644
30	IL	952	250	26.26%	327	34.35%	1,821,407	1,913
31	AR	330	72	21.82%	116	35.15%	436,286	1,322
32	NM	88	36	40.91%	31	35.23%	301,881	3,430
33	WA	297	113	38.05%	109	36.70%	839,709	2,827
34	TX	1,053	357	33.90%	392	37.23%	3,382,887	3,213
35	MN	428	106	24.77%	173	40.42%	1,581,925	3,696
36	AZ	217	75	34.56%	90	41.47%	639,853	2,949
37	KS	304	55	18.09%	129	42.43%	437,034	1,438
38	IA	431	70	16.24%	191	44.32%	483,652	1,122
39	MO	542	123	22.69%	256	47.23%	812,234	1,499
40	CO	179	51	28.49%	90	50.28%	574,213	3,208
41	NH	162	38	23.46%	83	51.23%	172,785	1,067
42	ME	228	50	21.93%	119	52.19%	215,149	944
43	OR	299	73	24.41%	160	53.51%	484,652	1,621
44	AK	55	10	18.18%	34	61.82%	113,874	2,074
45	OK	595	69	11.60%	389	65.38%	579,087	973
46	SD	179	15	8.38%	124	69.27%	129,164	722
47	VT	298	13	4.36%	217	72.82%	95,762	321
48	ND	265	11	4.15%	230	86.79%	117,825	445
49	MT	531	15	2.82%	469	88.32%	152,974	288
50	NE	782	25	3.20%	702	89.77%	274,081	350
	TOTAL	15,078	5,524	na	5,488	na	41,134,110	na
	MEAN	302	110	na	110	na	822,682	2,728

SOURCE: U.S. Department of Education, National Center for Education Statistics (1990/91 School Year) and CIC School Directory (Market Data Retrieval, Inc., Shelter, CT.)

TABLE 9
Descriptive Statistics of State Educational Costs, 1992-93

Factor	State Cost Per Pupil (ADA)
Base guarantee	$2,420
Base guarantee as percentage of state average cost	78%
Mean	$3,102
Median	$3,076
Standard Deviation	$383
Range	$2,057
Minimum	$2,022
Maximum	$4,079

SOURCE: Based on data from Legislative Research Commission.

TABLE 10
School District Sizes, Property Wealth, and State Educational Cost Factors Compared, 1992-93

	State Cost Factor	District Size Categories (in units of average daily attendance, or ADA) < 800	801-1,500	1,501-3,307[a]	3,308-10,000	> 10,000
1	Number of districts	23	40	64	44	5
2	Total ADA	11,063	44,896	147,086	233,099	145,910
3	Mean ADA	481	1,122	2,298	5,298	29,182
4	Mean state cost per pupil, given variations in district wealth	$3,239	$3,112	$3,141	$3,011	$2,687
5	Mean state cost per pupil, controlling for variations in district wealth	$3,093	$3,095	$3,099	$3,108	$3,182
6	Mean local contribution per pupil	$388	$410	$417	$473	$717
7	Mean Tier 1 state cost per pupil	$245	$205	$185	$160	$92
8	Mean district property wealth per pupil	$129,186	$136,554	$138,851	$157,726	$238,876
9	Range of district property wealth per pupil	$50,833 to $466,987	$52,387 to $307,909	$53,232 to $289,817	68,556 to 342,713	$113,176 to 359,708

[a]The number 3,307 indicates average school district size (in ADA) in Kentucky.
SOURCE: Based on data from Legislative Research Commission.

TABLE 11
Extreme District Cost and Wealth Compared, 1992-93

15 Least Costly School Districts (state cost per pupil)	Placement Among 15 Most Wealthy School Districts (per-pupil property wealth)	
Beechwood Independent	Yes	
Anchorage Independent	Yes	
Boone County	Yes	
Ft. Thomas Independent	Yes	
Fayette County	Yes	
Woodford County	Yes	
Campbell County	Yes	
Russell Independent	No	(37th)
Kenton County	Yes	
Oldham County	No	(22nd)
Bardstown Independent	Yes	
Lyon County	Yes	
Jefferson County	Yes	
McCraken County	No	(39th)
Murray Independent	No	(21st)

15 Most Costly School Districts (state cost per pupil)	Placement Among 15 Least Wealthy School Districts (per-pupil property wealth)	
Whitley County	No	(27th)
Dayton Independent	Yes	
Morgan County	No	(19th)
Jackson County	Yes	
Breathitt County	No	(32nd)
Clay County	No	(20th)
Monticello Independent	Yes	
Jenkins Independent	Yes	
Owsley County	Yes	
Magoffin County	Yes	
Wolfe County	Yes	
West Point Independent	Yes	
McCreary County	Yes	
Elliott County	Yes	
Bell County	No	(18th)

SOURCE: Based on data from Legislative Research Commission.

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MAY 31 1994

May 25, 1994

Brereton C. Jones
Governor
Governor's Office
Capital Avenue
Frankfort, KY 40601

Dear Governor:

Last summer you spoke to the Prichard Committee at its annual meeting about your hopes, concerns and commitments to Kentucky education. In your remarks you mentioned fiscal concerns about the number of school districts in Kentucky and asked the Prichard Committee, with other educational organizations, to study the question as to whether the Commonwealth can save financial resources by consolidating school districts.

As you know, this subject has historically been difficult and controversial. As a result, the Committee undertook the task you requested with great seriousness.

To do the job with the best possible information, we commissioned Professor Jacob Adams of Vanderbilt University, who has studied district sizes across the United States for several years, to investigate the situation in Kentucky. Dr. Adams has prepared a report which reviews the size of school districts and the relationship of size to efficiency across the United States and analyzes the relationship between district size and state educational costs in Kentucky. His goal was to determine whether or not there would indeed be cost savings to the state if the number of districts in Kentucky was reduced. In his study Dr. Adams also reviewed two previous studies on this same subject conducted by the Legislative Research Commission and the Kentucky Department of Education. Enclosed is his report.

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Dr. Adams' findings were reviewed by a task force assembled by the Prichard Committee composed of school superintendents and representatives of school boards as well as members of the Committee. This group concurs with Dr. Adams' findings and communicates to you the following conclusions and recommendations.

It is our view that savings to the Commonwealth that result from the consolidation of school districts will be extremely limited. This is primarily because "variations in state educational costs in Kentucky are the result of differences in school district property wealth, not district size," according to Dr. Adams. A large number of the smaller districts are also "low wealth" districts. As a result, the Commonwealth's cost per pupil would stay the same even if the size of these districts was changed. In fact, when the influence of district wealth is removed, state educational costs across school districts of different size vary by less than 3 percent, with larger districts costing the state more money per pupil. As Dr. Adams noted, this finding is reasonable "given the state's school finance reform focus on equalizing state aid to school districts." By funding school districts on a per-pupil basis and by varying state expenditures on the basis of district wealth--the core features of Kentucky's school finance reforms--Kentucky is now able to provide substantially more equal educational opportunities throughout the Commonwealth.

There are many other intangible reasons why using state authority to change the number of districts would present difficulties. Dr. Adams' report, I think, is a useful tool for analyzing the political, social and educational liabilities of reducing the number of districts.

Our group did conclude, however, that there are a number of other cost-saving measures that deserve exploration. These are referenced in Dr. Adams' study as "school district operations." Steps have already been taken in this direction in Kentucky, but they could be greatly increased. Therefore, the task force members, including the superintendents who participated in our discussions, recommended that steps to achieve efficiencies through new management strategies be pursued. We are asking the Kentucky Association of School Administrators and the Kentucky Department of Education to consider taking up these matters

The findings of this report provide a basis for a decision based on research which serves the best interests of public schools and the Commonwealth of Kentucky. Because they are different from the original premise behind your charge to the Prichard Committee in July 1993, we will gladly review the report in detail with you or your staff.

We appreciate the opportunity to serve and hope that this work will clarify an ongoing issue among Kentucky educators and lead to steps that produce the most efficient use of resources by Kentucky's public schools.

Sincerely,

Robert F. Sexton
Executive Director

Enclosure

cc: Thomas Boysen
Sherry Jelsma
Lois Weinberg